

# **Interconnection Standards: IEEE SCC21 P1547 Series**

Status Presentation Prepared for The P1547.1, P1547.2, and P1547.3 Meetings  
Washington DC: January 23 - 24, 2003

**Tom Basso, Secretary IEEE SCC21, P1547, P1547.2, and P1547.3**

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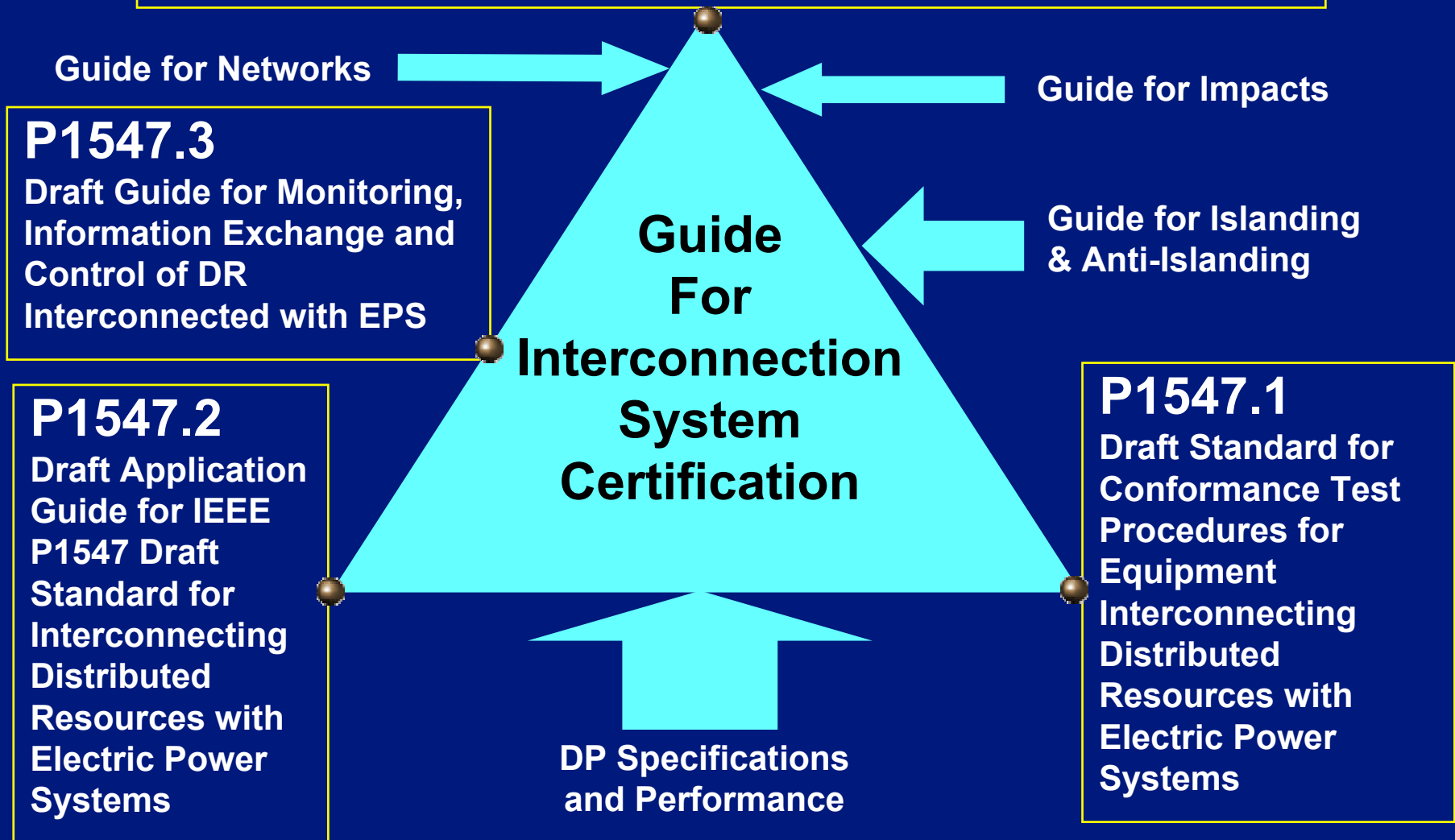
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(Technology Manager: NREL Distributed Energy and Electricity Reliability;  
IEEE Standards Association Board Member, and, Chair IEEE SCC21 and P1547)



# P1547 Series of Standards for Interconnection

**P1547** Draft Standard for Interconnecting Distributed Resources with Electric Power Systems



The above schematic identifies existing standards development projects (P1547 series) and activities under discussion by P1547 Work Group members.

# **IEEE Standards Development Approach**

- **Voluntary consensus standard**
  - Hallmark of the standards process
  - Open to all dedicated parties
    - P1547 promotes industry driven partnerships
  - IEEE ballot member categories:
    - General Interest, Producer, User: e.g.,  
Manufacturers, Utilities, Test Labs, Engineering  
Companies
- **Worldwide recognition**
  - IEEE and International Electrotechnical Commission (IEC) dual logo arrangement for IEC to accept IEEE standards for international use

# **IEEE P1547 Series Timeline**

- **1999 March: P1547 (Standard for Interconnecting) development authorized by IEEE**
  - Chairman: Richard DeBlasio, NREL
- **2001 June: P1547.1 (Test Standard) development authorized by IEEE**
  - Chairman: Jim Daley, ASCO Power Technologies, Inc.
- **2001 December: P1547.2 (Guide to P1547) development approved by IEEE**
  - Chairman: Dick Friedman, Resource Dynamics Corporation
- **2002 June: (Guide for Monitoring/Information Exchange/Control) development approved by IEEE**
  - Chairman: Frank Goodman, EPRI
- **TARGET DATES:**
  - 2003: P1547 Standard for Interconnecting published by IEEE
  - 2004: P1547.1 Voting Draft Completed
  - 2004: P1547.2 Voting Draft Completed
  - 2005: P1547.3 Voting Draft Completed

# IEEE P1547 Draft 10 Status

- **2002 August - September: P1547 Ballot Vote** (230 Ballot Members)
  - 90% (187) Affirmatives      - 7 Abstentions
  - 10 % (20) Negatives      - 93% returns
- **2002 September – 2003 January: Negative Ballots Addressed**
  - About one-third negative votes changed to affirmative
- **2003 February – March: P1547 Draft Revision Recirculated**
- **2003 April – June: Recirculation Results Addressed**
  - When >75% of votes are affirmative, IEEE Standards Board has an obligation to the majority to timely consideration of publishing the standard.
- **2003: Target Date for IEEE publication of P1547 Standard**

# Summary

- Industry driven partnership a success-- on average 100 members participate in a P1547 meeting. Estimated cost shared by the DER industry is \$300K/meeting times 15 meetings to date = \$4.5M.
- P1547 Series of Standards development gains sustainable support as state and federal activities heat-up. Need for technical standards becoming more evident as part of industry acceptable interconnection agreements.
- The DOE DEER support plays an essential DER role and provides resources in facilitating and leading the IEEE efforts.

# Contact Information

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- **IEEE SCC21 Standards Coordinating Committee 21** on Fuel Cells, Photovoltaics, Dispersed Generation, & Energy Storage  
<http://grouper.ieee.org/groups/scc21/>
- **P1547 Series of Standards for Interconnection**  
<http://grouper.ieee.org/groups/scc21/1547>
- **DOE** <http://www.eren.doe.gov/distributedpower/>

## **NREL**

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Golden, CO 80401-3393  
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# **Future Meetings: P1547-series**

## **DRAFT SCHEDULE/PLAN (1/24/03 onsite feedback):**

### **SCC21 WG Officials; then parallel meetings of P1547.1, .2, .3**

- **Tuesday 1PM – 5PM SCC21 (WG Officials)**
- **Wednesday 8AM - 5PM (P1547.1, .2, .3 WG Participants)**
- **Thursday 8AM - 5PM P1547.1, .2, .3 WG Participants)**
- February – May: each WG will have their own sub-WG meetings/electronic exchanges (e.g., sub-WG of P1547.1 considering June 14-16 in Las Vegas)
- June 3-4-5: P1547-series in Denver (NOT June 21 – 26, NOT July 11-25)
- October/November: Chicago or Las Vegas (NOT 2<sup>nd</sup> wk Oct)

(Basso to send passwords of all P1547 series URLs to all P1547 series WGs)